

REMARKS/ARGUMENTS

In the Office Action, the Examiner argues that Oshima discloses Applicant's claimed features of claim 1 where the hydrophilic polymer is substantially uniformly dispersed in a base within the key touch member and unevenly distributed in an area near a surface of the key touch member and that this feature of Oshima can be included in Yoshikawa. The Examiner basically argues that Oshima's hydrophilic polymer is bended into the synthetic resin, therefore, it is randomly, but uniformly, dispersed in the resin, which results in the hydrophilic polymer being randomly and unevenly distributed in the area near the surface of the key touch member. Applicant respectfully traverses this argument by the Examiner.

Applicant respectfully submits that if the polymer is uniformly dispersed in the resin, whether this uniform dispersal is random or not, that this uniform dispersal cannot then result in an uneven, i.e., non-uniform, distribution in the area near the surface. If the dispersal is uniform, even if it is randomly uniform, Applicant respectfully submits that this uniform dispersal in the synthetic resin cannot result in an uneven distribution in one part of the key touch member (the surface) and a uniform dispersal in another part (the base). Therefore, Applicant respectfully submits that claim 1 is allowable over the cited references for at least this reason.

However, to even more-particularly distinguish over the cited references, Applicant has further amended claim 1 regarding the structural characteristics of the hydrophilic polymer. As now more-particularly claimed, the synthetic resin has a large number of hydrophilic polymer particles added thereto in a dispersed manner. Thus, Applicant is more-particularly claiming that the hydrophilic polymer that is added to the synthetic resin is a large number of hydrophilic polymer particles. Applicant respectfully submits that this feature of Applicant's invention is clearly disclosed in Applicant's specification at least at para. 0020 and in Fig. 3.

In accordance with this feature of amended claim 1, since the key touch member is made of a first synthetic resin having a large number of hydrophilic polymer particles added thereto in a dispersed manner, the key touch member can readily be produced only by blending the hydrophilic polymer particles with the first synthetic resin. In the key touch member, a water molecule is bonded to an end of each hydrophilic group in the hydrophilic polymer by hydrogen bond with relatively weak bonding strength, to thereby obtain water absorption properties.

In contrast, Oshima apparently discloses a keyboard material which has water absorption properties, however, the keyboard material is made of a thermoplastic resin blended with a water-soluble polyamide resin. See Abstract. Thus, Oshima does not disclose the feature of amended claim 1 where the synthetic resin has a large number of hydrophilic polymer particles added thereto in a dispersed manner. Oshima defines that a water-soluble polyamide resin is a resin formed by converting –CONH-group of amide bond at an end or in a molecule of polyamide resin into methylol or formal group, thereby providing water-solubility (page 2, right and upper col., line 20 to left and lower col., line 4 in the original Japanese specification).

Since in such a water-soluble polyamide resin, a water molecule is bonded to the methylol or formal group by ionic bond with relatively strong bonding strength, the keyboard material of Oshima has water absorption properties higher than that of the keyboard material according to the present invention. However, the keyboard material of Oshima needs to convert –CONH-group of amide bond into methylol or formal group, resulting in higher costs. In contrast, the key touch member according to the present invention can be produced at lower cost only by blending the hydrophilic polymer with the first synthetic resin.

Furthermore, Ogasa cannot cure this deficiency of Yoshikawa and Oshima. Ogasa apparently discloses a composite material which has water absorption properties using a hydrophilic polymer. This composite material

includes a porous body formed of a hydrophobic polymer and a layer of a hydrophilic polymer. See Abstract. The porous body has a multiplicity of pores dispersed in the body, and each communicates with the surface of the body (claim 1). The layer of hydrophilic polymer is provided over at least a portion of the interior surface of each of the pores of the porous body. Abstract.

The composite material is obtained by a process including the steps of dispersing an aqueous solution containing a hydrophilic polymer and a foaming agent into a solution of a hydrophobic polymer in an organic solvent to form an emulsion, removing the water and the solvent from the emulsion to obtain a solid, and subjecting the solid to foaming conditions.

As discussed above, in Ogasa, since the hydrophilic polymer is disposed in each of the pores of the porous body which communicate with the surface of the body, higher water absorption properties can be obtained. However, the communicating paths appear on the surface, to thereby impair an appearance of the composite material. Further, the composite material of Ogasa needs to subject the solid to foaming conditions, resulting in higher cost.

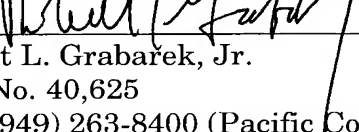
Thus, Applicant respectfully submits that neither Oshima nor Ogasa disclose the feature of amended claim 1 where the first synthetic resin has a large number of hydrophilic polymer particles added thereto in a dispersed manner. As discussed above, both Oshima and Ogasa disclose completely different structures. Therefore, Applicant respectfully submits that amended claim 1 is allowable over the cited references, either alone or in combination.

Applicant respectfully submits that the application is now in condition for allowance with claims 1-4 being allowable. If there are any questions regarding this Amendment or the application in general, a telephone call to the undersigned would be appreciated since this should expedite the prosecution of the application for all concerned.

As provided for above, this paper includes a Petition for an Extension of Time sufficient to effect a timely response. Please charge any deficiency in fees, or credit any overpayment of fees, to Deposit Account No. 05-1323 (Docket No. 056272.58171US).

Respectfully submitted,
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